

VIA FACSIMILE TRANSMISSION: 571.273.8300

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PATENT**Remarks**

The Office Action mailed October 19, 2005 and made final has been carefully reviewed and the foregoing amendment has been made in consequence thereof.

Claims 1-22 are now pending in this application, of which claims 1, 10, 20 and 21 have been amended. It is respectfully submitted that the pending claims define allowable subject matter.

The rejection of claims 1-5, 7, 8, and 10-16 under 35 U.S.C. § 103(a) as being anticipated by Maue et al. (U.S. Patent No. 5,995,380) in view of Cornell et al. (U.S. Patent No. 6,424,520) is respectfully traversed.

The Office Action concedes that Maue et al. does not disclose an insulative fuse door sealingly engaged to a second surface of a housing and positionable with respect to the housing to provide access to a fuse from an exterior of the housing. The Office Action cites Cornell et al. as disclosing a fuse door (16) sealingly engaged to a surface of a housing. Contrary to the suggestion otherwise in the Office Action, however, Cornell et al. does not disclose that the access patch (16) is sealed when attached to the snap-in cover (14). Rather, the access patch (16) includes edge tabs (17) on one side edge thereof, and a depression is formed in the cover (14) opposite the tabs (17) for prying the access patch (16) to an opened position. The combination of the tabs (17) and the depression in the cover (14) adjacent the access patch (16) would render the access patch (16) particularly vulnerable to moisture problems if the Cornell et al. housing were located in an exterior location per the instant invention. Additionally, the snap-in cover (14) has no apparent sealing features that would seal the access patch (16) when closed.

Moreover, neither Cornell et al. nor Maue et al. relate to electronic modules for use at an exterior location. Mau et al. relates to an electric junction box for distributing electrical power to and from wiring harness in an automotive vehicle. Such junction boxes and wire harnesses are

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typically located at an interior location in the vehicle that is protected from the elements, as opposed to an exterior location. Cornell et al. relates to a housing for circuit breaker and fuse panels for recreational vehicles, and describes an improved busbar that connects the circuit breakers. Applicant respectfully submits that such circuit breaker and fuse panels are generally located at a location interior to the vehicle where they are generally protected from the elements. Neither of the cited references disclose locating the devices at a location exterior to a vehicle.

Claim 1 has been amended for clarity and now recites an electronic module comprising "an insulative housing having opposed first and second surfaces," "at least one circuit board contained within said housing," "a plurality of connectors coupled to said circuit board, at least some of said connectors accessible within openings extending through the first surface of said housing," "at least one fuse electrically coupled to said circuit board," and "an insulative fuse door sealingly engaged to the second surface of said housing and positionable with respect to said housing to provide access to said fuse from an exterior of said housing, the fuse door providing a moisture-proof barrier when in a closed position, thereby protecting the at least one circuit board when the housing is located in an exterior location for ready serviceability of the module."

It is respectfully submitted that the Maue et al. in view of Cornell et al. fail to disclose or suggest the electronic module of claim 1. Neither of the references disclose a fuse door sealingly engaged to a housing and providing a moisture-proof barrier when in a closed position, thereby protecting the at least one circuit board when the housing is located in an exterior location for ready serviceability of the module. Additionally, both of the references apply to conventional junction boxes and housings located at a location interior to a vehicle where they are much less susceptible to the environmental issues described in the present specification.

Claim 1 is therefore submitted to be patentable over Maue et al in view of Cornell et al..

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Claims 2-5 and 8 depend from claim 1, and when the recitations of claims 2-5 and 8 are considered in combination with the recitations of claim 1, claims 2-5 and 8 are likewise submitted to be patentable over Maue et al. in view of Cornell et al.

The objection to claim 4 on the ground that 0.64 GET terminal system connectors is an intended use recitation and an objectionable designation of a connector specification is respectfully traversed. The reference to 0.64 GET terminal system connectors does not denote intended use, but rather evokes specific structure of a connector configured for use with such terminal system connectors. Applicant clearly is not attempting to claim a connector specification, but rather connectors *configured to engage* 0.64 GET terminal system connectors. It is respectfully submitted that claim 4 is directed to structural attributes that would be recognized and appreciated by those in the art and familiar with the applicable standard.

Additionally, nothing in the disclosure of Maue et al. or Cornell et al. indicate that connectors configured to engage 0.64 GET terminal system connectors are desirable or advantageous with their respective devices.

Claim 7 recites that fuse door comprises an exterior surface, at least a portion of said exterior surface being depressed relative to the second surface of said housing. The cover (45) of Maue et al. does not meet this recitation, and the access patch (16) of Cornell et al. is generally planar and also fails to meet this recitation. Element (14) of Cornell et al. is cited in the Office Action as disclosing a depressed surface, but the snap-in cover (14) is clearly not a fuse door. The access patch (16) is provided to access the fuses or circuit breakers, not the cover (14).

Claim 10 recites a sealed electronic input/output module for an exterior location, the module comprising: an insulative housing having a plurality of integrally formed connector receptacles on one side of the housing; at least one printed circuit board contained within said housing; a plurality of connectors coupled to said circuit board and extending into said connector receptacles; at least one fuse electrically coupled to said circuit board; and an insulative fuse

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door sealingly engaged to said housing beneath the connector receptacles to provide a moisture proof barrier at the exterior location, said fuse door being positionable to provide access to said fuse from an exterior of said housing.

As noted above, neither Cornell et al. nor Maue et al. disclose or suggest sealing issues when located in an external location. Rather, the Cornell et al. nor Maue et al. are submitted to be conventionally located in interior locations of the vehicle wherein the vehicle provides some protection from the elements. Neither Cornell et al. nor Maue et al. discuss moisture issues, presumably because they are protected from moisture due to their location in the vehicle, and neither of the references discloses a sealed construction suitable for use at an exterior location. In fact, neither of the references disclose sealing features at all.

Claim 10 is therefore submitted to be patentable over Maue et al. in view of Cornell et al.

Claims 11-16 depend from claim 1, and when the recitations of claims 11-16 are considered in combination with the recitations of claim 1, claims 11-16 are likewise submitted to be patentable over Maue et al. in view of Cornell et al.

The objection to claim 12 is respectfully traversed for the reasons noted above with respect to claim 4.

Claim 15 recites that the fuse door comprises side walls and an exterior surface, at least a portion of said exterior surface being concave in an area spaced from said side walls. The Maue et al. cover (45) is clearly flat between the side walls thereof, and so is the Cornell et al. access patch (16).

For the reasons set forth above, Applicants respectfully request that the Section 103 rejection of claims 1-5, 7, 8, and 10-16 be withdrawn.

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The rejection of claim 6 under 35 U.S.C. § 103(a) as being anticipated by Maue et al. in view of Jarry et al. (U.S. Patent No. 6,536,046) is respectfully traversed.

Claim 6 depends from claim 1, which for the reasons set forth above is submitted to be patentable over Maue et al. Jarry et al. does not cure the deficiencies of Maue et al. with respect to the invention of claim 1. More specifically, Jarry et al. does not relate to a fuse door, does not address sealing issues, and is clearly unsuitable for use in exterior locations. The Jarry et al. box (14) has a front plate (21) with a central opening (22) through which passes a part of a device mechanism. The Jarry et al. box is not moisture proof. Clearly, the opening (22) exposes the mechanism and the interior of the box, and the Jarry et al. box is therefore not suitable for exterior locations subject to the elements.

Claim 1 is therefore submitted to be patentable over Maue et al. in view of Jarry et al. because neither of the references disclose sealed structures with fuse doors, nor do the references suggest that moisture issues would render sealing of the devices desirable. When the recitations of claim 6 are considered in combination with the recitations of claim 1, claim 6 is likewise submitted to be patentable over Maue et al. in view of Jarry et al.

For the reasons set forth above, Applicants respectfully request that the Section 103 rejection of claim 6 be withdrawn.

The rejection of claim 9 under 35 U.S.C. § 103(a) as being anticipated by Maue et al. in view of De Waal (U.S. Patent No. D361,059) is respectfully traversed.

Claim 9 depends from claim 1, which for the reasons set forth above is submitted to be patentable over Maue et al. De Waal. does not cure the deficiencies of Maue et al. with respect to the invention of claim 1. More specifically, De Waal does not relate to a fuse door and discloses no sealing features in the outlet box cover illustrated in the Figures. Accordingly, there is no indication in the Figures that the De Waal outlet box cover is suitable for exterior locations

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subject to the elements, and there is no apparent link between the De Waal disclosure of the outlet box cover and the electronic module of the present invention..

Claim 1 is therefore submitted to be patentable over Maue et al. in view of De Waal because neither of the references disclose sealed structures with fuse doors, nor do the references suggest that moisture issues would render sealing of the devices desirable. When the recitations of claim 9 are considered in combination with the recitations of claim 1, claim 6 is likewise submitted to be patentable over Maue et al. in view of De Waal.

For the reasons set forth above, Applicants respectfully request that the Section 103 rejection of claim 9 be withdrawn.

The rejection of claims 17-22 under 35 U.S.C. § 103(a) as being unpatentable over Maue et al. in view of Cornell et al. and further in view of Saka et al. (U.S. Patent No. 5,532,431) is respectfully traversed.

Claims 17-18 depend from claim 10 that is submitted to be patentable over Maue et al. in view of Cornell et al. for the reasons set forth above. Saka et al. does not cure the deficiencies of Maue et al. and Cornell et al. with respect to the invention of claim 1. Specifically, Saka et al. disclose a sealed connector box, but do not disclose a fuse door sealingly engaged to a housing. Applicants note that the housing and the fuse door are separately recited in claim 10, and none of the cited references (Maue et al., Cornell et al., or Saka et al.) disclose structures having a housing *and* a fuse door, together with the other recitations of claim 10.

Claim 10 is therefore submitted to be patentable over Maue et al. in view of Cornell et al. and further in view of Saka et al. because none of the references disclose a fuse door sealingly engaged to a housing as claim 10 recites. When the recitations of claims 17-18 are considered in combination with the recitations of claim 10, claims 17-18 are likewise submitted to be patentable over Maue et al. in view of Cornell et al. and further in view of Saka et al.

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Claim 19 likewise recites, among other recitations, a housing having a cover portion and "an insulative fuse door removably engaged to a lower surface of said cover portion, said fuse door having a seal providing a moisture proof barrier when said fuse door is attached to said housing." Maue et al. in view of Cornell et al. and further in view of Saka et al. fail to disclose structures having a housing *and* a fuse door, together with the other recitations of claim 19. Thus, the references collectively fail to teach at least a fuse door having a seal providing a moisture proof barrier as claim 19 recites.

Claim 19 is therefore submitted to be patentable over Maue et al. in view of Cornell et al. and further in view of Saka et al. When the recitations of claims 20-22 are considered in combination with the recitations of claim 10, claims 17-18 are likewise submitted to be patentable over Maue et al. in view of Cornell et al. and further in view of Saka et al.

For the reasons set forth above, Applicants respectfully request that the Section 103 rejection of claims 17-22 be withdrawn.

In view of the foregoing amendments and remarks, all the claims now active in this application are believed to be in condition for allowance. Reconsideration and favorable action is respectfully solicited.

Respectfully Submitted,



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